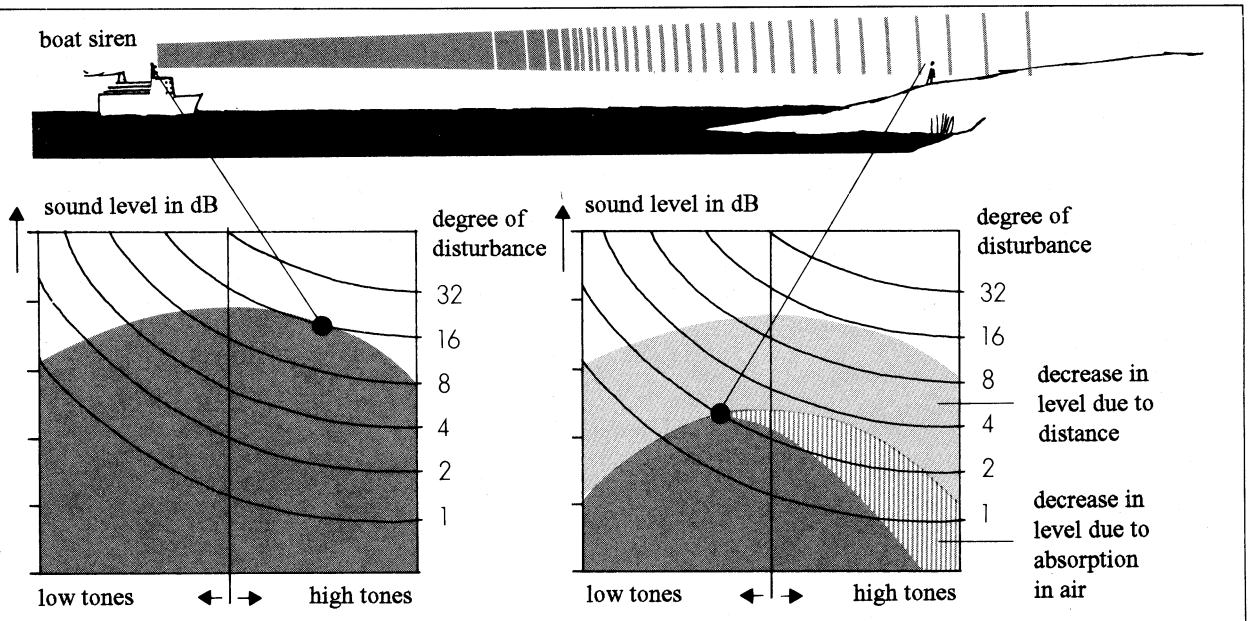
HIGH FREQUENCY SOUND IS GREATLY REDUCED BY PASSING THROUGH AIR

High frequency sound is reduced more effectively than low frequency sound by passing through air. In addition, it is easier to insulate and shield. If the noise source does not cause problems in its immediate vicinity, it may therefore be worthwhile to shift the sound toward higher frequencies

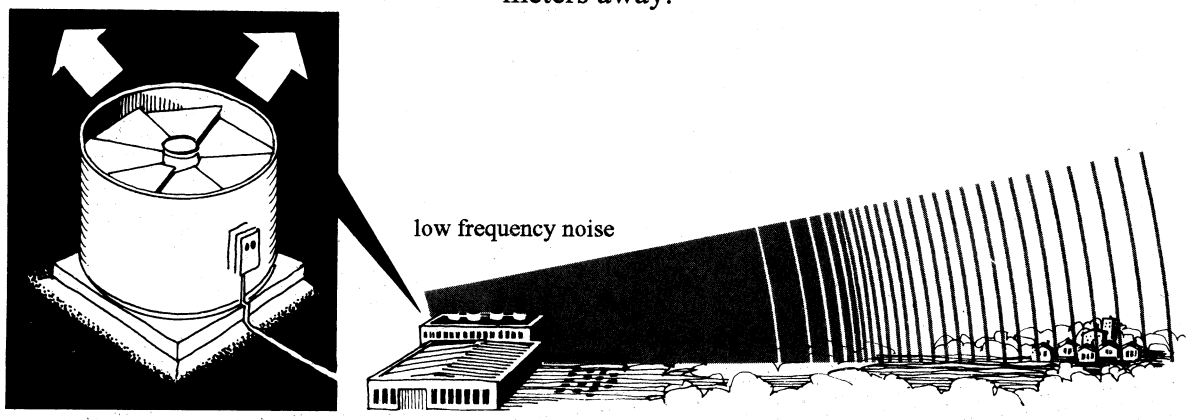
Principle



The boat siren, which seems extremely loud to those on board, is much less loud at a distance

EXAMPLE

The low frequency noise from roof fans in an industrial building disturbs residents of houses 400 meters away.

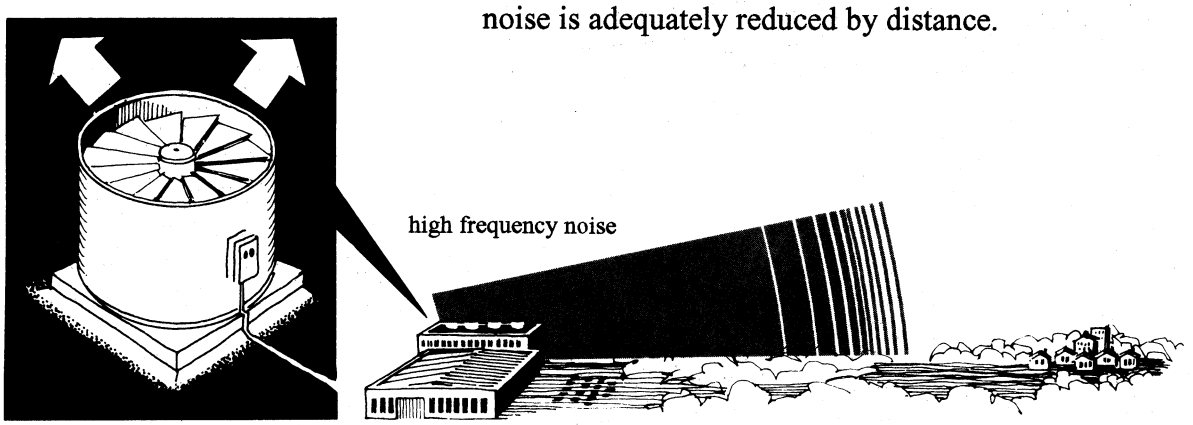


roof fan with few blades

residential community

CONTROL MEASURE

The rooftop fan is replaced by another of similar capacity but with a larger number of fan blades. This produces less low frequency noise and more high frequency noise. The low frequency noise no longer causes disturbances, and the high-frequency noise is adequately reduced by distance.



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